

Open Face Optical Fiber Array for Coupling to Integrated Optic Waveguides and Optoelectronic Submounts

ABSTRACT OF THE DISCLOSURE

An optical fiber array having a V-groove chip with a front portion and a rear portion. The optical fibers are disposed in the V-grooves. The optical fibers are bonded (e.g. glued) to the V-groove chip in the rear portion of the chip. The optical fibers are not bonded to the front portion of the chip. Preferably, the optical fibers have endfaces that are flush with a front face of the chip. The optical fibers extend from the rear portion. In use, the optical fiber array is pressed against V-grooves of an integrated optics chip or optoelectronic submount. Since the optical fibers are not bonded to the front portion, they can move slightly to fit precisely into V-grooves of the IO chip or submount. Hence, optical fiber alignment is improved. Also, there is no danger of residual adhesive preventing close contact between the optical fibers and IO chip.